

THE OFFICE ACTION

In the Office Action issued on September, 2003, the Examiner rejected claims 1-6, and 8-14 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner also rejected claims 1-6, and 8-14 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. The Examiner rejected claims 1, 2, 5-6, 8, 9, 12-16, 19, 20, 22, 23, 25 and 28-30 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,183,613 to Edwards (Edwards) in view of U.S. Patent No. 5,415,822 to Cook (Cook). The Examiner further rejected claims 3, 4, 17 and 18 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook and further in view of U.S. Patent No. 3,646,155 to Scott et al. (Scott). The Examiner also rejected claims 10, 11, 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook and further in view of U.S. Patent No. 6,099,676 to Hayashi (Hayashi).

REMARKS

Applicants have carefully considered the final Office Action issued on September 24, 2003. Applicants respectfully request reconsideration of the application in light of the following comments.

A. Claims 1-6 and 8-14 Comply with 35 U.S.C. §112

The Examiner rejected claims 1-6 and 8-14 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, it is the Examiner's position that the specification fails to provide support for the recitation that the crosslinkable thermoplastic consists essentially of polyolefin. The Examiner also rejected claims 1-6, and 8-14 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. Specifically, it is the Examiner's position that the term "essentially" is a relative term that renders the claim indefinite.

Applicants are somewhat confused by these rejections, but

nevertheless provide the following comments in an attempt to respond to the Examiner's rejections. First, applicants would like to point out that the transitional phrase "consisting essentially of" is an accepted term having a defined and accepted meaning. See MPEP §2111.03 (8th Ed.). Specifically, the term "consisting essentially of" limits the scope of a claim to the specified materials "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 190 UPSQ 461, 463 (CCPA 1976). Applicants therefore submit that the use of such a phrase does not render the present claims indefinite under §112, second paragraph, and respectfully request withdrawal of this rejection.

Second, and with respect to the §112, first paragraph rejection, applicants submit that it is permissible to limit claims to a more narrow scope than the broadest embodiment in the specification. While it is, of course, true that amended claims cannot be broader than the original disclosure, the converse does not apply. That is, while the broadest description of the abrasion resistant layer in the specification does not exclude the possibility of additional components, it is perfectly within the applicants' rights to narrow the present claims to recite an abrasion resistant layer to a crosslinked thermoplastic consisting essentially of a polyolefin. In this respect, applicants note that, in one embodiment, the specification discloses that the crosslinkable thermoplastic includes a moisture crosslinkable polyolefin without any additional recited components. Applicants respectfully request withdrawal of this rejection.

B. The Pending Claims Are Not Obvious Over Edwards In View Of Cook

The Examiner rejected claims 1, 2, 5-6, 8, 9, 12-16, 19, 20, 22, 23, 25 and 28-30 under 35 U.S.C. §103(a) as being unpatentable over Edwards in view of Cook. Applicants respectfully traverse for at least the following reasons.

First, there is no motivation to combine the two references. As detailed in the response to the previous office action, to properly combine references under 35 U.S.C. §103, there must be some suggestion or motivation to modify or combine reference teachings (MPEP §2143.01). Here, despite the Examiner's arguments,

there is no motivation to combine the teachings of Cook and Edwards. In this respect, the Examiner states, "[O]ne of ordinary skill in the art at the time the invention was made would have readily appreciated using as the polyolefin taught by Edwards a crosslinkable polyolefin, i.e. a polyolefin crosslinked by means such as moisture, as it was well known in the art to use a crosslinkable polyolefin as the abrasion resistant layer as shown for example by Cook." Even assuming for the purposes of argument that this statement is true, it fails to provide proper motivation for combining the references. That is, even assuming that one skilled in the art would have appreciated that a crosslinkable polyolefin could have been used in the invention of Edwards, the absence of any motivation to do so precludes the finding of obviousness.

In this respect, the mere fact that a prior art device could be modified so as to produce the claimed invention is not a basis for an obviousness rejection unless the prior art suggested the desirability of such a modification. *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984) (the combination of the references taught every element of the claimed invention. However, without a motivation to combine a rejection based on a *prima facie* case of obviousness is improper.) Here, the Examiner has not provided any reasons why one skilled in the art would be motivated to combine the teachings of Cook and Edwards. At most he has provided an argument that one skilled in the art recognized that such a combination is possible. A recognition that something can be done is distinct from a motivation to do it. Absent such a suggestion or motivation, the Examiner's combining of the two references is a classic example of impermissible hindsight reconstruction. *Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 26 USPQ2d 1018 (Fed. Cir. 1993). Conclusory statements on the propriety of combining the teachings of prior art references, such as those provided by the Examiner in this case, are insufficient to sustain an obviousness rejection. *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002).

Applicants submit that, despite the Examiner's arguments, one skilled in the art would not have readily appreciated using a crosslinkable polyolefin as the polyolefin taught by Edwards. In support of his position, Examiner states "it is noted

Edwards is directed to using general polyolefins known to one in the art, and Edwards is not limited to any particular, i.e. crosslinkable or non-crosslinkable, polyolefin. One of ordinary skill in the art at the time the invention was made would have readily appreciated using as the polyolefin taught by Edwards a crosslinkable polyolefin." (Office Action, pg. 4).

Applicants submit that this is a mischaracterization of the materials and that such a substitution is not as straightforward as the Examiner would have it seem. In this respect, applicants take issue with the Examiner's contention that because Edwards does not explicitly disclose that the polyolefins used therein are uncrosslinked, that a crosslinked polyolefin is contemplated and could thus be used. The Examiner will appreciate that due to absence of unsaturation, conventional polyolefins are not crosslinked. That is, polyolefins require specialized crosslinking techniques due to this absence of double bonds in the polymer backbone. To one skilled in the art, the use of the term "polyolefin" denotes a conventional uncrosslinked polyolefin. A positive recitation of crosslinking is required to denote a specialized crosslinkable polyolefin. It is improper and misleading for the Examiner to thus contend that Edwards supports the use of crosslinked polyolefins without any positive recitation of this. Further, the applicants note that Edwards repeatedly refers to the polyolefin as a thermoplastic throughout the patent. A crosslinked polyolefin would take on at least some characteristics of a thermoset. Failure of Edwards to note this is further evidence that only an uncrosslinked polyolefin is contemplated as the abrasion resistant layer therein.

In addition, Cook relates to a method of forming a composite extrusion in which an elastomer rubber main body member is cured prior to mating with a thermoplastic layer, while Edwards specifically teaches curing the elastomeric substrate after contacting it with the melted polyolefin compound (col. 5, lines 52-60, claim 1). These two references are drawn to different processes to making composite extrusions. One skilled in the art practicing the invention of Edwards would not be motivated to use the teachings disclosed in Cook since Cook relates to a different process, and there is no indication that these teachings would be suitable

for use therein. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 123 USPQ 349 (CCPA 1959). Here, that is exactly what the Examiner is proposing – changing the principle of operation of the references in an attempt to meet the recitations of the present claims.

Even assuming the correctness of the Examiner's contention that Cook discloses a crosslinked polyolefin thermoplastic, then its proposed use in the method disclosed in Edwards would be impossible. That is, Edwards discloses that the polyolefin coating is substantially melted when adhered to the elastomer substrate (col. 8, lines 36-47). Once cured, a crosslinked thermoplastic will not remelt. That is, crosslinking provides molecular rigidity that prevents remelting of a compound. Thus, assuming that the Examiner is correct in his statement that Cook discloses a crosslinked polyolefin thermoplastic, such a polyolefin would not be suitable for use in Edwards, which requires that the polyolefin coating be substantially melted in his process. Thus, Edwards actually teaches away from the use of a crosslinked polyolefin. As the Examiner will note, it is improper to combine references where the references teach away from their combination. *In re Trasselli*, 218 USPQ 769 (Feb. Cir. 1983). For at least these reasons, Applicants submit that the combination of Cook and Edwards fails to render the present claims obvious.

Furthermore, and with respect to claims 8 and 22, even assuming the propriety of the proposed combination, such a combination fails to disclose or suggest contacting the elastomer rubber with the crosslinkable thermoplastic before the step of at least partially crosslinking the thermoplastic. In support of his rejection, the Examiner states

regarding claims 8 and 22, it is noted that Edwards teaches the abrasion resistant layer is co-extruded along with the channel member and the two layers are contacted directly after extrusion such that one of ordinary skill in the art would have readily appreciated that the modification of Edwards with the crosslinkable abrasion resistant layer taught by Cook would create a process wherein the abrasion resistant layer is crosslinked after contacting the

channel member because (1) the two layers are co-extruded, i.e. the abrasion resistant layer could not be extruded if it were already crosslinked and (2) the layers are contacted directly after extrusion. (office action, pg. 5)

With regard to Examiners point (1), applicants respectfully disagree. First, a crosslinked abrasion resistant layer could be extruded if the degree of crosslinking was not extensive. That is, the amount of crosslinking in a polymer is a continuum, ranging from fully crosslinked (a rubber) to a lightly crosslinked polymer. A lightly crosslinked polymer may still melt to some degree, at least enough to be extruded. Second, irrespective of the amount of crosslinking in a polymer, the polymer may still be extruded after crosslinking if it was still in its molten state. That is, while a heavily crosslinked polymer will not remelt once it solidifies, it may be processed (e.g. extruded) while still in its molten state. With regard to Examiners point (2), nowhere does Edwards or Cook require that the layers be contacted immediately after extrusion with no intervening steps. Neither reference discloses a step of crosslinking the abrasion resistant layer. The Examiner has no support for his position that, assuming the presence of such a crosslinking step, it could not feasibly take place after extrusion and before contact of the two layers.

**C. The Present Claims Are Not Obvious Over Edwards and Cook
In View of Scott**

The Examiner rejected claims 3, 4, 17 and 18 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook in view of Scott. Applicants respectfully traverse.

The disclosures of Edwards and Cook are outlined above. Scott is directed to a method of crosslinking a polyolefin by grafting silane groups onto the polyolefin backbone and subsequently exposing the product to moisture. Applicants submit that the proposed combination fails to render the present claims unpatentable for at least the following reasons.

There is no motivation to combine the references. To properly combine references under 35 U.S.C. §103 there must be some suggestion or

motivation to combine the teachings of these separate references. In this respect, the lack of motivation for combining Edwards and Cook is outlined above. Further, there is no motivation to combine Scott with either Edwards or Cook. In support of his position, the Examiner states "one of ordinary skill in the art at the time the invention was made would have readily appreciated using as the moisture crosslinkable polyolefin taught by Edwards as modified by Cook a silane grafted polyolefin crosslinked in a steam bath as suggested by Scott et al. to enable crosslinking of the polyolefin under less critical crosslinking conditions than those which are normally present in the conventional crosslinking techniques." What "critical crosslinking conditions" is the Examiner referring to? Applicants submit that crosslinking using silane grafting techniques are at least as "critical" as other crosslinking techniques. Applicants submit that the presence of a steam bath and the requirement of the silane graft present at least as critical conditions as other techniques. Thus, Applicants submit that the proposed combination of Edwards and Cook, in view of Scott, fails to render the present claims unpatentable. Withdrawal of this rejection is respectfully requested.

**D. The Present Claims Patentable Over Edwards and Cook
In View of Hayashi**

The Examiner rejected claims 10, 11, 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Edwards and Cook and further in view of Hayashi. Applicants respectfully traverse.

The disclosures of Edwards and Cook are detailed above. Hayashi is directed to a method of making a glass run channel including the steps of bonding a tape member to an extruded rubber member. The tape member comprises polyethylene, polypropylene or a thermoplastic elastomer.

Despite the Examiner's arguments, there is no motivation to combine Edwards, Cook and Hayashi. The reasons why Edwards and Cook cannot be combined are detailed above. It is improper to combine Hayashi with either Edwards or Cook since the references disclose and teach completely different subject matter. That is, Edwards and Cook both teach the coextrusion of a thermoplastic onto a

rubber member. Hayashi, on the other hand, discloses the lamination of a tape member onto a rubber main body member. There is no indication that the methods disclosed in either Edwards or Cook could properly use a tape member as the abrasion resistant layer. This is particularly true with several of the embodiments described in Cook (such as those in Figure 2c), which would require multiple tape members to cover the varied surfaces of the composite extrusion. This is also the case with many of the embodiments disclosed in Edwards, which require multiple surfaces to be coated and would thus require multiple tape members, rollers, etc. as required by the method of Hayashi. The Examiner has provided absolutely no evidence that the teachings of Hayashi could be combined with Cook and/or Edwards. In fact, the references actually teach away from the use of a tape member. In this respect, Edwards specifically discloses that the polyolefin layer is substantially melted when it is contacted with the elastomeric substrate. Hayashi, on the other hand, discloses a solid tape member that only begins to melt when contacted with the hot based rubber member.

CONCLUSION

In view of the foregoing comments, Applicants submit that claims 1-6, 8-20, 22, 23 and 25-30 are in condition for allowance. Applicants respectfully request early notification of such allowance. Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned to attempt to resolve any such issues.

If any fee is due in conjunction with the filing of this response, Applicants authorize deduction of that fee from Deposit Account 06-0308.



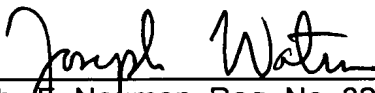
U.S. Serial No. 09/910,337
Attorney Docket No.: CSA7-00143

RECEIVED
DEC 02 2003
TC 1700

Respectfully submitted,

**FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP**

Date: Nov. 21, 2003



Timothy E. Nauman, Reg. No. 32,283
Joseph E. Waters, Reg. No. 50,427
1100 Superior Avenue
Seventh Floor
Cleveland, OH 44114-2518
216/861-5582